REMARKS

Summary of Office Action

Claims 1-3 are pending in the application.

Claims 1 was rejected under 35 U.S.C. 102(b) as being anticipated by Kompanek U.S. Patent No. 4,190,785 (hereinafter "Kompanek").

Claims 2 and 3 was rejected under 35 U.S.C. 103(a) as being obvious in view of Radice U.S. Patent No. 4,633,12 (hereinafter "Radice").

Summary of Applicant's Amendments

Applicant has amended claims 1-3 solely in order to expedite prosecution. Applicant reserves the right to claim any subject matter lost by the amendment of claim 1 in a continuation or divisional application.

Applicant has added new claims 4-20.

Applicant's Response to the
Rejections Under 35 U.S.C. 102(b)

Claims 1 was rejected under 35 U.S.C. 102(b) as being anticipated by Kompanek.

Applicant's invention, as defined by amended claim 1, includes a guide-frame that is operable to receive said at least one guide-tooth such that at least a portion of said guide-tooth is operable to distort into said guide-frame.

Kompanek discusses a base that contains cutouts which are located beneath each electrode being slightly larger than the electrode which fits therein.

Applicant's amended claim 1, however, includes a guide-frame operable to receive at least one guide-tooth such that at least a portion of said guide-tooth is operable to fit into said guide-frame. A piezoelectric

layer is located between the guide-tooth and the guide-frame.

Kompanek does not show or suggest applicant's invention of claim 1 of a piezoelectric layer located between a guide-tooth and a guide frame operable of receiving said guide-tooth. For at least this reason, applicant respectfully requests that the Examiner's rejection of claim 1 under 35 § U.S.C. 102(b) be withdrawn.

It should be noted that applicant has amended claim 1 solely in order to expedite prosecution. The Examiner stated that Kompanek discusses:

> "a portion of said layer has a maximal displacement and a frame or said piezoelectric layer where in said portion substantially fits in said frame when said maximum displacement occurs" (Office Action, page 2).

It is clear that Kompanek does not show or suggest configuring a frame to substantially fit a piezoelectric layer when maximum displacement of the piezoelectric occurs. Applicant's teaching of protecting a piezoelectric layer from exceeding a maximum displacement by use of a properly configured frame allows the maximum amount of power to be generated by a piezoelectric layer while ensuring that the piezoelectric layer does not break. Kompanek does not afford any such protection because Kompanek does not show or suggest such a configuration. Accordingly, applicant reserves the right to claim the subject matter lost by the amendments of claim 1 in a continuation or divisional application.

Applicant's Response to the
Rejections Under 35 U.S.C. 103(a)

Claims 2 and 3 was rejected under 35 U.S.C. 103(a) as being obvious in view of Radice.

Applicant's invention, as defined by amended claim 2, includes a flexible array of flexible piezoelectric generators separated by a flexible isolation layer where the isolation layer has a greater stiffness than the piezoelectric generators. As such, the flexbile piezoelectric generators may bend before the flexible isolation layer - thus efficiently, and frequently, focusing force onto the piezoelectric generators.

Applicant's invention, as defined by amended claim 3, includes a flexible array of flexible piezoelectric generators separated by a flexible isolation layer where the piezoelectric generators have a greater stiffness than the isolation layers. As such, the piezoelectric generators may bend after the isolation layer bends - thus efficiently focusing forces of particular magnitudes onto the piezoelectric generators.

Radice discusses a non-flexible keyboard. To provide a keyboard function, compressible PVDF's are provided as sensors for each key of the keyboard.

The Examiner stated that Radice discusses "the generators (made of for example PVDF) have a first stiffness and said isolation layer (made of a non-piezoelectric material) would lead inherently [to] have its second stiffness different from its first thickness." (Office Action, page 3).

Applicant's inventions, as defined by amended claims 2 and 3, however, include flexible arrays having flexible piezoelectric generators and flexible isolation layers. As a result, particular forces applied to such arrays are focused and molded in particular ways.

Radice, however, does not discuss flexible arrays. Radice discusses non-flexible keyboards where compressible PVDF's are provided as sensors for each key

of the keyboard. Accordingly, applicant respectfully requests that the Examiner's rejection of claims 2 and 3, and any claims dependent therefrom, under 35 U.S.C. 103(a) be withdrawn.

Additionally, the Examiner stated that applicant's "two claims cover all possibilities except for the stiffness to be equal" (Office Action, page 4). The relation of Applicant's claims 2 and 3 are irrelevant. Applicant has claimed more than a difference in the stiffnesses of piezoelectric generators and an isolation layer. Applicant's invention of claim 2 includes an isolation stiffness greater than the stiffness of piezoelectric generators. Applicant's invention of claim 3 includes an isolation stiffness less than the stiffness of piezoelectric generators. As shown above, the different stiffness configurations in arrays provide arrays that function differently. Such a difference in functionality is nothing other than a showing of patentability for each of the configurations. In light of the foregoing, applicant reserves the right to claim any subject matter lost by the amendments of claims 2 and 3 in a continuation or divisional application.

New Claims

New claims 4-7 are allowable because claims 4-7 depend from either allowable claims 2 or 3.

New claims 8-11 are allowable because claims 8-11 depend from allowable claim 1.

New claims 12-15 are allowable for at least the reason that none of the prior art, used either alone or in combination, shows or suggests a guide-frame and spring configuration for receiving and distorting a piezoelectric layer.

New claims 16-20 are allowable for at least the reason that none of the prior art, used either alone or in combination, shows or suggests a piezoelectric generator located between guide-teeth and guide-teeth receivable frames.

Conclusion

Applicant respectfully submits that this application, including claims 1-20, is in condition for allowance.

Reconsideration and prompt allowance of this application are respectfully requested.

Respectfully Submitted,

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